



# *the* **ILLINOIS ENGINEER**



UNITED STATES AIR FORCE ACADEMY CHAPEL (see story page 6)

THE ILLINOIS ENGINEER  
JULY, 1961  
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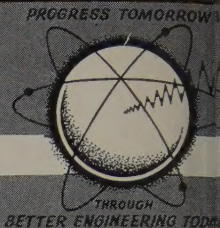




# THE ILLINOIS ENGINEER

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# D. S. MAGOWAN

"Mac," as he was affectionately known to his many friends, passed away Saturday evening July 1, at the Sherman Hospital, Elgin, following a brief illness. This is a great loss and shock to his many friends.

Born in Iowa City, Iowa, "Mac" graduated from Iowa State University at Iowa City in 1920, with a Bachelor's Degree in civil engineering. He received a Civil Engineering Degree from the same university in 1925.

His engineering career started in Cedar County, Iowa, where he worked as assistant county engineer, followed by employment with the Iowa State Highway Commission.

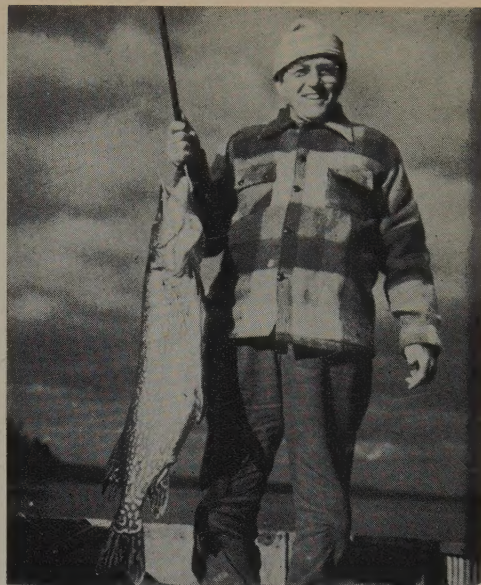
"Mac" reported to Illinois Division of Highways on July 1, 1923, in the Effingham District, worked as resident engineer, chief of survey party, assistant construction engineer, assistant to engineer of Local Roads and City Streets and district construction engineer. In 1943 he transferred to Chicago District 10, as construction engineer and in this capacity was in charge of construction of highways and bridges in the Chicago and Cook County area. He continued in this capacity until his services were required in Springfield, where he was a member of the executive committee in charge of technical employment and property. In the latter capacity "Mac" had the opportunity of mentoring many young engineers at engineering schools throughout the state, who were encouraged to follow highway engineering as a career and will remember him in this activity.

Following a three year period with the Bureau of Local Roads and City Streets "Mac" on April 1, 1955, received the appointment as District Engineer of District 1, Elgin, Illinois, where he continued to attract an ever increasing host of friends.

Notwithstanding time required to fulfill the responsibilities of his position, he devoted a lot of time and energy to the activities and betterment of his profession. He was a recent Past President of the State Chapter of the National Society of Professional Engineers and the only member of the State Society who has the distinction of having served as Chapter President of three chapters in the state—DuKane, Chicago, and Capital.

"Mac" was a member of the First Methodist Church of Elgin, Masonic Lodge of Effingham, Shrine of Davenport, Illinois Association of Highway Engineers and the National Society of Professional Engineers.

Hobbies—yes "Mac" had three—golf, fishing and to "have a Full House". Of the three he enjoyed fishing the most. In his early days as a fisherman, he was considered somewhat of a Neophyte, not having



caught a fish much larger than his hand, he had little to brag about. This all changed on his first trip to Canada, some 10 to 12 years ago. The accompanying picture of his prize catch (21½#) shows his smile of satisfaction and accomplishment. This brought forth the remark "Call Me Champ" and "Champ" he was and remained, for this catch was the largest fish on this and many subsequent trips to Canadian waters.

Last but not least—Regardless of "Mac's" professional and social activities, his family was always his most important concern. He is survived by his widow Lorna; a daughter, Marilyn of Elgin; two sons, Kenneth of Elgin and Donald H. of Effingham, and two sisters, Miss Florence Magowan and Mrs. Ruth Kirkpatrick, both of River Forest.

## EULOGY TO D. S. MAGOWAN WRITTEN BY

C. A. (SANDY) WALLS, *Chicago*.

Mr. Walls was a lifetime friend of Mr. Magowan.

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The Chicago Chapter of the Illinois Society of Professional Engineers honored its past presidents with a presentation of the newly designed Silver NSPE shield lapel buttons at a Dinner Dance June 9.



Past Presidents honored were, L to R:

L. M. SPURLING,	1944	Illinois Bell Telephone Co.
JOHN DOLIO,	1953	John Dolio and Associates
GEO. CHLEBICKI,	1959	Geo. J. Chlebicki and Associates
C. A. WALLS,	1950	Portland Cement Association
W. WAYNE WALLACE,	1947	Portland Cement Association
FRANK W. EDWARDS,	1952	Stanley Engineering Co.
GEO. L. DEMENT,	1951	Commissioner of Public Works
KARL C. HOEGLUND,	1954	Bauer and Black
JOHN G. DUBA,	1957	Mayor's Administrative Assistant
VIRGIL E. GUNLOCK,	1949	Chm. Bd. Chicago Transit Authority
GERALD M. MARKS,	1960	Illinois Lighting Associates

## WELCOME, NEW MEMBERS OF I.S.P.E.

### BEVERLY

Boyer, John Russell—EJ&E RR, 86th & Burley Ave., Chicago—National Member

Ruhl, David Antes—11142 S. Bell Ave., Chicago 4—National Member

### BLOOMINGTON AREA

Fugate, Kendall Morgan—208 Fairway Drive, Bloomington—EIT (Introd.)

Martin, Walter John—1222 E. Empire, Bloomington—National

Patterson, Robert Joseph—114 Greenwood Ave., Bloomington—EIT

### CAPITAL

Deem, William C.—1317 S. Clay, Jacksonville—National Member (Introd.)

### CENTRAL ILLINOIS

Briggs, Ralph G., Jr.—214 E. Oaks Terrace, Atwood—National Member (Introd.)

### CHAMPAIGN COUNTY

Bader, Donald James—803 W. Clark, Urbana—Student Member

Berg, Brian M.—508 W. Union, Champaign—Student Member

Christofferson, Cynthia Ann—1005 W. Gregory Drive, Urbana—Student

Crull, Stanley Warren—311 E. Green St., Champaign—Student

Emrich, William M.—1447 W. Rosemont, Chicago—Student

Gerdes, Lyle Dean—RFD #2, Grant Park—Student

Hamlin, Wayne Douglas—394 Forbes Hall, Champaign—Student

Harris, Ronald James—227 Edgewood Dr., E. Peoria—Student

Hocking, Ralph Tedd—1207 W. Clark, Urbana—Student



nson, Jack Jay—1101 W. California, Urbana—  
 Student  
 es, Robert Allen—204 Forbes Hall, Champaign—  
 Student  
 nicek, Milton C.—601 W. Washington, Urbana—  
 Student  
 asnitz, Ronald H.—1102 W. Nevada, Urbana—  
 Student  
 rtin, Lyle S.—1008 Nevada, Urbana—Student  
 ler, Kathryn Ann—1005 W. Gregory, Urbana—  
 Student  
 ers, Arno R., Jr.—1207 Whitebridge Hill, Winnetka  
 —Student  
 lemiller, Thomas J.—604 E. Armory, Champaign—  
 Student  
 m, Gerald E.—9046 N. La Crosse, Skokie—Student  
 illips, John David—Rm. 396, Forbes Hall, Cham-  
 paign—Student  
 nzak, Jack M.—2317 S. Glenwood, Springfield—  
 Student  
 is, Robert L.—102 Bonpart, Webster Groves, Mo.—  
 Student  
 hemmel, Philip O.—1621 Carolina Drive, Urbana—  
 Student  
 holl, Rolland D.—1008 Nevada, Urbana—Student  
 no, Wayne M.—1307 E. 72nd Place, Chicago—  
 Student  
 nith, Randal M.—1205 N. Robb, Robinson—Student  
 hornborough, Raymond Joseph—2014 Lloyd Ave.,  
 Waukegan—Student  
 omezak, Arthur Raymond—316 Scott House, MRH,  
 Champaign—Student  
 dowiarz, Joseph Walter—4937 S. Wood St., Chicago  
 —Student  
 Volin, Gerald—410 E. Chalmers, Champaign—Student  
 ulle, Franklin C.—1826 S. Central, Cicero—Student  
 aurenson, John Graham—112 E. Daniel, Champaign  
 —Student  
 ihl, Douglas W.—Davis Junction—Student  
 CHICAGO  
 echolt, Paul Robert—169 W. 146th St., Riverdale 27  
 —National  
 dbrooke, Robert Franklyn—3719 W. 214th St.,  
 Matteson—National  
 andler, Stanley J.—7815 Drexel Drive, University  
 City, Mo.—Engineer in Training  
 schoenegge, Bruce Ronald—203 Durham Lane, Roselle  
 —EIT (Introd.)

## DUKANE

Berkel, James A.—322½ S. River, Montgomery—EIT  
 Morgan, William Rogers—319 Bevier Place, Aurora—  
 EIT (Introd.)

Vaulato, John Edward—Laraway Road, Joliet—EIT

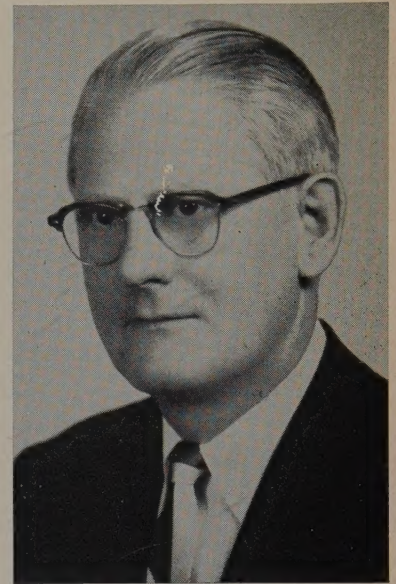
## EGYPTIAN

Coffey, Ralph Jones—2212 Pine St., Eldorado—EIT

(Continued on Page 8)

## PRESIDENT'S COLUMN

We have just passed the time of year when we  
 commemorate the signing of the Declaration of Inde-  
 pendence of our country. Truly, it is our good fortune  
 to live in a great  
 country. It is a land  
 of the free. A royal  
 birth is not required  
 to gain success nor  
 does one have to  
 come from a family  
 of means. In our  
 United States, **"it's  
 not your name that  
 counts. It's what  
 you do that counts."**  
 We all stand on the  
 threshold of a chal-  
 lenging and promis-  
 ing future.



Harold Sommerschild,  
President

History and the  
 writ of antiquity re-  
 veal countless ex-  
 amples for our re-  
 view: Mary, a pro-  
 vincial peasant girl in Palestine, gave birth to a Babe  
 who transformed the face of the earth. A heritage  
 of knowledge was left for our benefit by George Wash-  
 ington Carver.

A little girl born about 100 years ago in Janesville,  
 Wisconsin, who spent her early years in poverty on  
 the streets of Chicago, spent her latter years in a  
 mansion high in the mountains of California. Why?  
 Because among the many songs she wrote for our en-  
 joyments were such all time favorites as "When You  
 Come to the End of a Perfect Day" and "I Love You  
 Truly." Her name; Carrie Jacob Bond.

A boy named Nathaniel, born in 1804, said of him-  
 self, "Not 20 people in town knew of my existence."  
 Today, thousands know the name of Nathaniel Haw-  
 thorne because of what he did with a prolific pen.

April 18, 1955 the death of a man was announced  
 on the first page of most of the newspapers of the  
 country. He was born of middle class Jewish parents  
 in Ulm, Germany in 1879. It is said, he did not speak  
 a word until he was 3 years old. Even his parents  
 feared he was deficient.

At 10 he mastered a geometry book, at 11 he dis-  
 cussed the philosophy of Immanuel Kant, at 14 he  
 taught himself algebra, analytical geometry, integral  
 and differential calculus, none of which was a part of  
 his school curriculum.

Albert Einstein stated his theory of relativity when  
 26 years of age and was the winner of a Nobel prize.

All of these attest to the fact that, **It's not your  
 name that counts. It's what you do that counts.**



News of the passing of our beloved Past President, Donald S. Magowan, is another example of dedicated service. His name will live on because of what he has done. Our Society has been enhanced by the devoted leadership he contributed.

In a democracy such as we enjoy, we esteem a man for what he really is, what he does for the benefit of mankind. The foregoing served unstintingly and labored diligently to provide us with advantage. In one way or another they were rewarded for their dedicated service.

Will our Society or the world of tomorrow be better because of the fruits of our labor today? What is your contribution to society?

At this time, when we cherish thoughts of those who so liberally gave to assure the freedom of our nations, is it not appropriate for us to rededicate ourselves to the service of others? This can be done in a number of areas; political, religious or professional to name a few.

Read once again the objectives of our Society as included in our Constitution. Each of us prescribe to these objectives when we requested membership in our Society. Would we not fulfill our obligation to society in general if we diligently adhere to these objectives? I believe we would. Remember, **it's not your name that counts. It's what you do that counts.**

#### HOW THE SUCCESS OF

## High-Type Asphalt pavement can mean new tax savings for your highway program:

The number one choice of America's state highway engineers for the past two decades has been modern high-type Asphalt pavement. Advances in engineering know-how, in Asphalt technology and in development of the mechanical paver, in 1958 alone, increased the use of high-type Asphalt pavement by 618% over the year 1940.

Millions of your tax dollars have already been saved due to the more economical construction and low maintenance costs of modern Asphalt pavement. **Recent engineering advances have developed new DEEP STRENGTH Asphalt pavement which will provide even better performance and pavement economy in the future.** These savings can mean more and better local and interstate roads for you.

Get all the facts now. Write today for free copy of **THE BETTER WAY TO BETTER ROADS.**



*Ribbons of velvet smoothness . . .  
ASPHALT-paved Interstate Highways*

**THE ASPHALT INSTITUTE**

2606½ South Sixth Street  
Springfield, Illinois

The Chicago Chapter Ethics & Practice Committee of the Illinois Society of Professional Engineers recently reviewed an editorial that appeared in the January 9, 1961 edition of STEEL. The Committee felt that the approach taken by Brown & Sharpe Manufacturing Company in regard to **free engineering** was very commendable. The Committee further believed that if more firms were aware of this simple solution to the problem, many of them would take similar action.

### ENGINEERING BREAKTHROUGH!

For a long time, we have been advocating the elimination of some of the evils of free engineering.

Too many people in industry send out requests for construction, plant, and equipment proposals that are merely fishing expeditions.

The recipients of the requests often feel compelled to spend thousands of dollars on engineering work in the knowledge that only one—or perhaps none—of them will get an order.

This appalling waste of engineering time and manpower, most people agree, should be reduced.

But so far, few have been willing to do anything except applaud or offer encouragement.

Brown & Sharpe Mfg. Co. is a notable exception.

It is asking its customers and prospects to send along a purchase order with each inquiry for an engineering proposal involving cams, tooling, or special attachments for automatic screw machines.

When each proposal is submitted, the customer will be invoiced for \$15.

But the \$15 charge will be credited to the customer's account if, as a result of the proposal, he buys tooling, a machine, or an attachment.

Says Brown & Sharpe: "We believe this practice will discourage inquiries being sent to us when there is no intention of following our recommendations, as has happened in the past."

The \$15, of course, will not cover engineering costs but it should eliminate some of the nonproductive engineering work that has prevented Brown & Sharpe's engineering department from devoting more of its time to bona fide inquiries.

We think Brown & Sharpe is on the right track.

We hope you will agree that this is a good time to join the movement to reduce one of industry's biggest and most unnecessary wastes.

Engineering is never "free."

No matter whether you are a supplier or a customer, you help pay for it.

IRWIN H. SUCH  
Editor-in-Chief  
STEEL





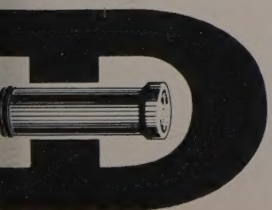
## Everything... except clean water

With our ever-expanding population, the problem of water pollution grows more serious each day... and demands action NOW. Untreated sewage from homes and industries is pouring into our nation's waterways. Many rivers and lakes that once provided fresh water for daily needs or for recreational activities are now

stagnant and lifeless... menaces to the public health rather than natural resources to be proud of.

Adequate sewage treatment is the only answer to the water pollution problem. Modern living continually depletes our fresh water supply... modern sanitary facilities alone can restore it.

Providing improved sanitation for better living



# DICKEY

sanitary salt-glazed clay pipe

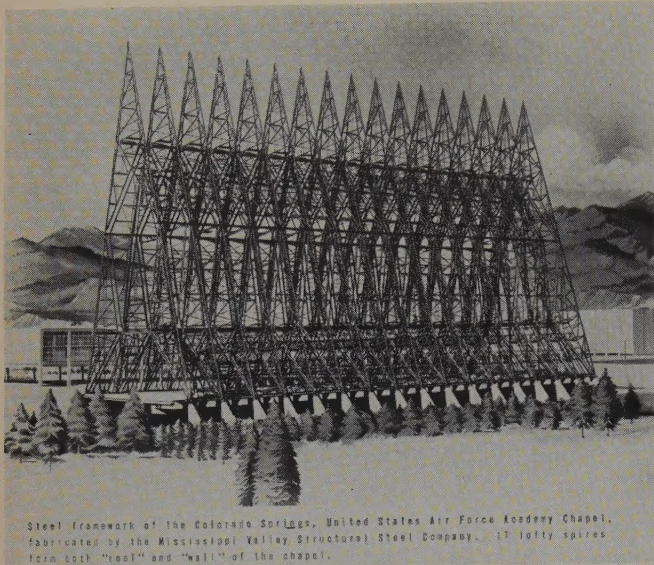
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If it's made of clay it's good... if it's made by Dickey it's better



## STEEL TOPS OUT ON AIR FORCE ACADEMY CHAPEL PROJECT



In the foothills of the Colorado Rockies on the campus of the United States Air Force Academy, the framework of a unique chapel has now topped out. Completion of the imposing structure is scheduled for mid 1962.

The chapel, which the Air Force Academy describes as its most "commanding" structure, will provide separate places of worship for Protestants, Catholics and Jews—all within one building.

This singular chapel and the spirit of unity which it embodies had its beginning in the minds of Architect-Engineers Skidmore, Owings & Merrill, who set out to achieve a structure which would display no familiar exterior ecclesiastical device—rather it would achieve a new one which all men might find of inspiration. Seventeen identical architectural "thoughts" repeat one motif, a spire which is both roof and wall and which lifts the eyes upward.

One hundred identical tetrahedrons of steel, together form the spires. Steel was selected to achieve great strength and a simple crispness of line. And steel was peculiarly flexible, adapting itself to the requirements of the job.

Though the building itself is pure and simple in unadorned design, the fabrication of the tetrahedrons was a complex procedure. As many as seven steel components converge at single points, at uncommon angles, to form the polyhedrons.

They were inplant fabricated by Mississippi Valley Structural Steel Company and shipped by rail and truck to the vast 17,500 acre campus which skirts the base of the Rampart Range seven miles north of Colorado Springs.

The components were cut from tubular steel.

To speed the work precisely, Mississippi Valley first developed special job tools, including a giant jig

in which the 4½ ton tets were held and turned as the angles were torch cut with the aid of specially developed cutting patterns and then welded in assembly.

As the work progressed the completed tetrahedrons moved west from St. Louis via rail on 3-car assemblies. Three tetrahedrons were shipped on each assembly. Up to nine cars were used per train. The tetrahedrons were longer than the flat cars which dictated the assembly. To hold them in position and to prevent shifting in transit, Mississippi Valley developed special bolsters which, after each shipment, were returned to MVSS for re-use.

At the site the tetrahedrons were craned into place, bolted, and when all 17 spires were assembled the joints were welded.

Fabrication included the manufacture of steel devices used to fasten the panels of aluminum which will cover the chapel framework.

Roughly a half million pounds of aluminum is being used for this job. Cupples Products Corporation has the challenging assignment of fabricating the aluminum panels and aluminum strip windows which will complete this phase of the project. On the roof there are 712 exterior aluminum panels. On the interior 420 panels form the ceiling of the Protestant chapel. These panels weigh about 350 pounds each. Cupples is fabricating 2,209 aluminum strip windows of multi-colored cast glass. They will create "ribbons" of light rising from floor to ceiling between the tetrahedrons.

This "Chapel of the future for an Air Force of the future" will present a commanding face to the campus which surrounds it. From their anchored bases, the 17 spires, in a near vertical, rise 143 feet above the campus. Its architectural accent on the scene is the more apparent and derives from the fact that all other structures, such as the Cadet Quarters building (whose overall length is 1337 feet 9 inches) is but 32 feet 11 inches above the campus level.

The protestant nave lies above the terrace level. A broad flight of steps leads to a vestibule which admits to the nave, where 36 pews flank each side of the central aisle, seating 900 cadets at one service.

At the terrace level the Catholic chapel, essentially rectangular in character, seats 500 cadets in 21 pews which again flank a center aisle. Dual sets of steps lead to this chapel. Sacristy, vestry and altar will adjoin at the north end. In this chapel, too, similar stained glass panels will diffuse the sunlight.

Beyond the Catholic chapel is the circular Jewish worship center. It will be enclosed by vertical wooden uprights with inserts of white opalescent glass opening into four separate vestibules. Three groups of pews facing the East will seat 100 cadets.

(Continued on Page 10)



## GOTAAS IS APPOINTED TO GREAT LAKES COMMISSION

Dean Harold B. Gotaas of the Technological Institute at Northwestern University has been honored with appointments to three advisory groups.

In the latest of the three, Governor Otto Kerner of Illinois named Gotaas to the Great Lakes Commission in June. Gotaas also was

named secretary of the five-member Illinois delegation to the Commission. It is an advisory group designed to help the Great Lakes states and Canada work together in sharing one of their greatest natural resources—the five big lakes.

The Commission has commitments on water level, fisheries, pollution control, and seaways navigation, among others.

At a press conference earlier this month, Governor Kerner

said he foresaw the possibility of great projects in developing the Great Lakes, which would do as much for the surrounding states as the TVA has for Tennessee.

Gotaas also has been named a consultant to the U.S. Army Transportation School at Fort Eustis, Va. In addition, he has been named the civil engineering mem-



Harold B. Gotaas

ber on the Committee on Government Matters Related to Engineering, of the Engineers Joint Council. The committee advises federal agencies on engineering manpower and other questions.

Gotaas is or has been on committees of the National Institutes of Health, National Science Foundation, and chairman of the American Society of Civil Engineers' research committee.

He has wide experience in both civil engineering and public health. During World War II, he served with the division of health and sanitation, Institute for Inter-American Affairs, and became division president during 1945-46. He received the U.S. Legion of Merit and decorations from four Latin American nations for his work in improving public health in Latin America during that War.

In 1948, his outstanding research as a sanitary engineer earned him (and co-worker William Oswald) two coveted national awards of the ASCE. The two men showed how certain algae can be used to efficiently digest sewage wastes; the algae then can be used as animal food. The process is being used today in many waste treatment plants, and is a likely technique for long space voyages. It both eliminates wastes and carbon dioxide, and supplies food and oxygen to the space travelers.

Dean Gotaas is a member of the Illinois Society of Professional Engineers (Chicago Chapter) and the National Society of Professional Engineers.



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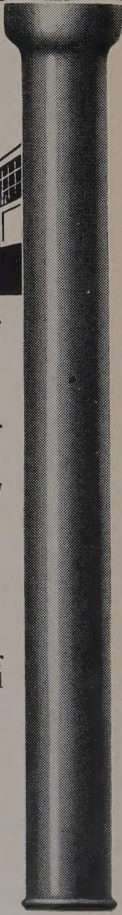
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Daley, Joseph Robert—714 Congress St., Ottawa—EIT  
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#### LAKE COUNTY

Sandberg, William Andrew—221 Elm Court, Liberty-  
ville—National (Introd.)

#### NORTH SHORE

Schoenberger, Robert L.—444 Greenleaf Ave., Glencoe  
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Stone, Arthur H.—806 Ouilmette Lane, Wilmette—  
National (Introd.)

Witte, John Herbert—6531 Drake Ave., Lincolnwood  
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Brown, Norman Guy—306 N. Eastwood Ave., Mt.

Prospect—National (Introd.)

Kunze, Walter Edward, Jr.—534 S. Lincoln Lane,  
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Meyer, Mermod V.—1004 Jefferson St., Pekin—  
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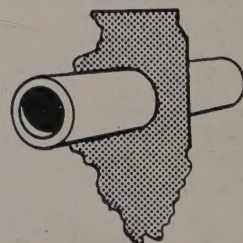
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## THE MISUSE OF THE TITLE "ENGINEER"

By JERRY S. DOBROVOLNY

Great strides have been made during the past 20 years by such organizations as the Illinois Society of Professional Engineers, to create a favorable image of the Engineering profession in the eyes of the lay public.

The registered professional engineer prides himself in being a member of a recognized profession just as lawyers and doctors do. With all this pride, it is difficult for me to understand, however, why the job classification of engineer is being proliferated by some employers.

In my travels throughout the State of Illinois in the past 18 months, I have talked with engineering personnel from companies located in Rockford, Moline, Kaukegan, East St. Louis, Chicago, Harvey, Peoria, Mukakee, and many others. One practice that is carried on by many of these companies is a very disturbing one, and that is, to assign a title of engineer to an individual who is not a registered professional engineer or does not hold a Baccalaureate Degree from an accredited College of Engineering. Many times an employer will give the employee the title of engineer rather than raise his salary. This is a great disservice to the profession of engineering.

Recently, some of the companies involved have had pressure brought upon them by some of their "engineers" to form a union. These same companies have allowed the practice of giving individuals the title of engineer without the employee having the necessary qualifications set forth by the Professional Registration Law or by having satisfied certain requirements towards a Baccalaureate Degree in engineering. I think it is high time that this practice be discontinued.

I would like to suggest that wherever employees who are not registered professional engineers or do not have a degree from an accredited College of Engineering, are doing technical work, that a more appropriate title be established for them. Such titles are in common usage in various parts of the country where professionalism is practiced to a higher degree. These titles include such names as Engineering Aid, Engineering Associate, Engineering Technician, Testing Technician, and Assistant Engineer. Graduates from Technical Institutes often are assigned these titles. Perhaps, if the State of Illinois would have some high-level Technical Institutes providing qualified technicians, the employers would become more aware of the need of maintaining a distinction between job classifications.

This is not to prevent anyone who is qualified by virtue of an extensive self-study program on his part, either on the job or to night school work, from ever being called an engineer on the job roster. This type

of person can become a registered professional engineer by taking the necessary state examination. However, as the engineering profession becomes more and more dependent upon the basic engineering sciences, it will become more difficult for one to "come up" through the ranks as was frequently the case in the past.

## KESSELL VICE-CHAIRMAN FOR N.S.P.E. ENGINEERS-IN-GOVERNMENT

Word has been officially received from the Annual



A. C. Kessell

Convention of the National Society of Professional Engineers in Seattle that Springfield's Art Kessell has been elected Vice-Chairman of the NSPE Functional Section for ENGINEERS-IN-GOVERNMENT for the coming year. He will represent the Central Area comprised of Illinois, Indiana, Kentucky, Michigan, Ohio, West Virginia and Wisconsin.

## KIWANIS INTERNATIONAL BACKS PLAN TO HONOR PUBLIC WORKS OFFICIALS

CHICAGO—Kiwaniis International is asking its members and others interested in the public works field to nominate candidates for the 1961 "TOP TEN PUBLIC WORKS MEN-OF-THE-YEAR" Awards.

The "Illinois Engineer" is glad to cooperate with Kiwanis in this effort, and urges its readers to nominate individuals they feel deserving of such an award.

The "TOP TEN" Awards are based on accomplishments with resources and manpower available, engineering and administrative abilities, professional activities, leadership qualities and service to the community. The Awards are made to officials on the Federal (including military), State, County and Local levels. Nominations for the Awards may be made through local Kiwanis Clubs or by application to the American Public Works Association, 1313 E. 60th Street, Chicago 37, Illinois. Deadline for this year's nominations is August 15.

Announcement of this year's winners will coincide with the 1961 NATIONAL PUBLIC WORKS WEEK observance set for October 1-7. The ten officials selected will receive plaques commemorating the Award at appropriate ceremonies to be held in their communities.



## SUMMARY OF I.S.P.E. BOARD OF DIRECTION ACTION,

DECATUR, JUNE 3, 1961

1. Three Regional Workshops lauded by Chapter representatives.
2. Student Chapter Activities were officially placed under I.S.P.E. Education Committee.
3. A Convention motion requesting the Board of Direction to study growing size of the Board was tabled.
4. University of Illinois Student Chapter Constitution and By-Laws were approved.
5. Recommendation by ISPE Executive Director for consideration of a Society Group Life Insurance Program was postponed until September.
6. CHAMPAIGN was officially named 1962 CONVENTION SITE.
7. Al Osterling, Portland Cement Assoc., Springfield, was appointed as representative of ISPE to the Legislative Committee of the Associated Employers of Illinois.
8. The ISPE Executive Director recommended for use in the fall membership drive a new plan by which any member joining after LABOR DAY would pay 1962 DUES in total, thereby being granted about three months free state membership. This plan has been used in the Ohio and Minnesota Societies and it was found that retention of new members increased because they did not receive one dues bill almost on top of the other. It takes ISPE about one month to process a new member and NSPE about two months before the national magazine starts reaching his address. This recommendation is being studied by the ISPE Membership Committee with a report due July 15 at the Executive Committee meeting in St. Louis.
9. The matter of removal of Registered Professional Engineers and Notary signatures on the Mines & Minerals Department permit forms was tabled until the January Board Meeting.
10. The ISPE Executive Director announced that he had proposed to the Missouri Society that Illinois and Missouri hold a joint Annual Convention in St. Louis in 1963. The ISPE Board of Direction enthusiastically sanctioned this proposal and requested that ISPE work with MSPE toward this end.
11. President Harold F. Sommerschild was instructed to proceed with the formation of an Illinois Distinguished Board of Consultants—(an Advisory Board of Distinguished Industrial Executives.

## AIR FORCE CHAPEL (Cont.)

This provision of separate chapels for Catholics, Jews and Protestants within one structure is a relatively new concept with the U.S. Air Force reflecting the unity of our times.

There is a perfection of line and workmanship achieved in this chapel which reveals the meticulous approach to its design, fabrication and erection.

Congress, itself, gave its attention to the plans the design period. During fabrication and prior shipment, the modular tetrahedral unit was mocked up actual size and fitted with its surface covering.

The mock-up was inspected and approved by representatives of the steel, aluminum, architectural and construction firms collaborating on the project.

When completed, the chapel, exclusive of paving and other secondaries, will represent an investment of \$3,237,298.00. Though it is a chapel expressly designed for 2,550 Air Force Cadets, its design and purpose will no doubt make it a national shrine of great significance.

## RECORD NUMBER OF C. E. DEGREES AWARDED AT U. OF I.

The total number of degrees awarded in civil engineering at the University of Illinois during the academic year 1960-61 reached a new high of 263 with the conferring of 118 degrees at the June 1961 commencement. The previous high was last year when 248 degrees were awarded, 124 Bachelor of Science, 106 Master of Science, and 18 Doctor of Philosophy.

Approximately one-half of the degrees, or 134, for the 1960-61 academic year were bachelor's degrees, 103 master's degrees and 26 were Doctor of Philosophy degrees.

Degrees are conferred four times a year, June, August, October, and February. Nearly all courses required for the degrees in civil engineering are given both semesters, with a selected number in the summer session. As a result students may complete the required courses without delay. Bachelor's degrees were received by 25 students last August at the end of the summer session and by 62 others in February at the end of the first semester.

Undergraduate enrollment in civil engineering at the University of Illinois remained essentially the same during the past two years, with 612 enrolled in the fall of 1960. Enrollment for each of these two years was slightly higher than for each of the previous three years. The number of graduate students has doubled since 1953, increasing from 132 in 1953 to 265 in the fall of 1960.





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## 1961 LEGISLATIVE ACTION REPORT

By LEONARD K. CRAWFORD  
ISPE Legislative Chairman

As Chairman of the I.S.P.E. Legislation Committee, during the past few weeks I have been attempting to follow the progress of a number of bills and have been in consultation with representatives of a number of other organizations, including the two architect associations, I.A.C.E., the State Chamber of Commerce, Illinois Engineering Council, and of course with Bob Newbury, ISPE Executive Director. Any results obtained in influencing legislation cannot be claimed by any one organization or individual, but are rather the combined results of representatives of organizations working together.

The principal item of legislation in which we were concerned was, of course, HOUSE BILL 1429—Corporate Practice for the Registered Professional Engineers. The bill, as presented to the Legislature by Representative Charles K. Willett, was the result of the "great debate" at the Peoria ISPE Convention, followed by a meeting with representatives of C.E.I. This bill PASSED the HOUSE with little difficulty, but ran into stubborn opposition when it reached the Senate License and Miscellany Committee. The opposition came from "package dealers", represented by attorneys for two powerful engineering companies and an oil products company. A meeting was therefore held on short notice on June 28th with representatives of the opposing factions. Also present were Representative Willett, Bucky Gordon, attorney for I.A.C.E., and Pat Murphy, Legislative Chairman for I.A.C.E.

In the meantime, SENATE BILL 804 had been introduced. This bill authorizes the formation of professional associations which would be substantially in the same form as corporations except there would be no limited liability.

The apparent purpose of this legislation is to permit professional people not now authorized to incorporate to obtain some of the benefits of corporations under the Internal Revenue Code. Although time was not available for detailed legal study of Senate Bill 804, Attorney Gordon felt that it would accomplish the principal objectives of House Bill 1429. It was therefore proposed that those opposing House Bill 1429 would withdraw their opposition and permit the bill to advance with the understanding that if Senate Bill 804 became a law, House Bill 1429 would be tabled. The alternative to this suggestion was an amendment proposed by the opponents of H.B. 1429 which would stricken the restrictive clauses in the bill and make it comparable to the Structural Engineering Act. Since this particular item had been thrashed out thoroughly by the I.S.P.E. general meeting, these

people were told that this alternative was strictly unacceptable to I.S.P.E.

The opponents agreed to the suggestion, and Representative Willett recommended such action. In the confusion of the closing days, however, both bills passed. The Governor will be advised by I.E.C. that should he sign S.B. 804, there would be no objection to having him veto H.B. 1429. If, on the other hand, for some reason the Governor plans to veto S.B. 804, he will be asked to sign H.B. 1429.

Actually it appears that S.B. 804 might be more acceptable to the engineering profession than H.B. 1429. Under it, all members of the firm must be professional, and all officers and directors must be registered. It has another advantage in that there would be no tampering with the Illinois Professional Act. As you well know, there are many who feel that no attempt should be made to amend the P. E. act.

H.B. 433—provided that voluntary associations of one or more persons could sue or be sued. Executive Director Newbury reported that he opposed this legislation in Committee and it was defeated early in the session.

H.B. 621—Licensing of electrical contractors—the House License & Miscellany Committee defeated this Bill.

H.B. 754 would have provided for the regulation of plumbing contractors. The bill, as written, contains references to work which appeared to be infringements on professional engineers. The bill was amended to take out the language objected to but was subsequently defeated in the Senate.

H.B. 1208 provided for licensing of landscape architects. This bill was bitterly opposed by the architects. So far as I.S.P.E. was concerned, the objection was to wording in the bill which appeared to infringe upon the rights of professional engineers. In this we were guided by an opinion from an attorney for Registration and Education which stated that where a service was specifically mentioned in one act and not in another, it would be interpreted that only the profession in whose act the reference was made would be permitted to do the work. This bill was killed in the Senate committee.

H.B. 1301 would have removed a provision in the statute relating to the recording of plats. This bill was amended to remove the objection of land surveyors. The bill passed both Houses and is awaiting signature of the Governor.

H.B. 1649. This bill would have extended the Grandfather Clause of the Surveyor's Act to permit



County surveyors with fifteen years of experience to become registered without an examination. The bill passed in the House.

H.B. 1706 increased the fee for renewal for Land Surveyors. This bill passed.

H.B. 1577 provided that disciplinary actions conducted by professional associations should be conducted in accordance with due process of law. This bill passed the House but was beaten in the Senate.

H.B. 1391 provided for the licensing of water plant operators. This bill was tabled in the House committee when opposed by certain labor unions.

S.B. 878 and H.B. 1757 were appropriation bills covering construction work performed at various institutions and other State properties. The bills, as introduced, included the schedule of fees for architectural and engineering services. This schedule is the same as has been included in similar bills since 1950 and was much below the I.S.P.E. schedule. The result would probably have been substandard professional services to the State. Attempts were made to amend the bills, and at this writing, it appears that at least S.B. 878 was amended to include fees much more acceptable. H.B. 1757 was not amended to increase fees, since most of the funds were already obligated by contract.

S.B. 908 was supported by I.S.P.E. This bill passed. The provisions of this bill will increase the salary of the supervising architect from \$10,000 per year to \$13,500 per year, making his salary a little higher than some of the professional permanent staff. The result of this bill should make it easier to get qualified persons to accept the job.

## In and Out of the MAILBAG

»»»•«««

Dear Mr. Newbury:

Thank you for addressing us on "The Professional Profile" at our luncheon meeting on April 26, 1961, sponsored jointly by the Illinois Society of Professional Engineers and our Civic Committee.

Your talk was most instructive and stimulating, and made this one of our most interesting meetings. We also enjoyed the very lively question and answer period which followed.

It was a pleasure to be associated with you in this meeting, and we hope you will be with us again.

Yours very truly,

George C. Harris  
Chairman

NOON LUNCHEON COMMITTEE  
Western Society of Engineers

Dear Bob:

Your suggestion for altering the format of the ISPE Annual Meeting was, I believe, a success. The level of participation and comments which I heard were most encouraging and favorable. Although I don't think there is really any doubt, I have been anxious to hear NSPE's formal announcement to the effect that we (ISPE) were first in this year's membership contest.

I am enclosing what residue I have from the Secretary's file for your disposition. Also enclosed is a carbon copy of a letter to NSPE.

Would you also please consider this letter as a change of address notice. My new address after June 1, 1961 for mail purposes is:

John E. Housiaux  
Public Utilities Division  
American Appraisal Company  
525 East Michigan Street  
Milwaukee 1, Wisconsin

I have full confidence that the administration and management of ISPE is in capable hands and I shall continue to follow its progress with considerable interest.

Very truly yours,  
JOHN E. HOUSIAUX, P.E.  
(Former ISPE Secretary)

Dear Mr. Newbury:

Upon my return to the office after an absence of ten weeks, on a European vacation, I find the Past President's gold pin, which has been presented to me by the Illinois Society of Professional Engineers. I note that my secretary acknowledged receipt of the pin at an earlier date.

I regretted being absent during the presentation ceremonies, and the opportunity of again assembling with my many friends in I.S.P.E. However, our European trip had been planned many months earlier and it was something that could not be easily delayed. The trip has certainly been rewarding.

Very truly yours,  
WARREN & VAN PRAAG, INC.  
By Alex Van Praag, Jr.

Milton Lunch, P.E.  
Asst. Executive Director  
National Society of Professional Engineers  
2029 "K" Street, Northwest  
Washington 6, D.C.

Dear Milton:

There has been considerable interest expressed in the problems recently experienced by Michigan and Ohio with regard to the unconstitutionality of their Registration Laws.



At our June 3rd ISPE Board of Direction meeting it was moved that I contact the National Office for any late pertinent information regarding these cases. Any Summary or information you can give me with regard to the effect of decisions made in these states will be greatly appreciated.

I am sure that the reason for our Board's interest is not to wait for a similar reaction on the part of the courts in Illinois and if there is something we can do to avoid such action, we would like to recommend same to our Registration Laws Committee for their consideration.

Very sincerely yours,  
Robert J. Newbury,  
Executive Director

Dear Bob:

Glad to hear that you arrived home safely and that you enjoyed your visit to Ohio.

You did a fine job in helping with our workshop and gave us many suggestions. We will use these suggestions and try to give Illinois more competition in membership.

Sorry I won't be traveling west to Seattle.

Say hello to Harold Sommerschild and Manuel Garcia.

I will ask Paul Furney to send you a copy of the membership letter from Emmett Evans which you requested.

Thanks again for helping us during the Workshop.

Very sincerely yours,

Roger W. Loveless, P.E.

President

Ohio Society of Professional Engineers

Mr. Robert Newbury, Executive Director  
Illinois Society of Professional Engineers  
714 Myers Building

Springfield, Illinois

Dear Bob:

Thanks so much for your kind letter and the IBM tab run samples which you sent, but especially the letter.

I would like you to know how much we enjoyed having you here. I'm only sorry that we couldn't have spent some time in Columbus looking around, including out to my house for a steak.

Let me assure you with all sincerity, Bob, that having you at Athens was like a breath of spring. Your presence not only added considerably to the quality of the workshop but your friendly attitude was certainly appreciated also.

Your ideas gave me a new perspective of many facets of the societies; in fact I believe your stay here

will have considerable influence on us all for a long time to come. Many have commented to me about how you do things at Illinois, and have expressed a wish to get some of the same things going in Columbus.

So thanks again, Bob, and I hope I may feel free to call you from time to time in the future in regard to how we may set up the IBM system. I have some questions right now, but will wait until I get some more data and information.

Best Regards,

Paul Furney

Ass't. Executive Secretary

Ohio Society of Professional Engineers

Dear Mr. Newbury:

You are undoubtedly aware of the fact that the landscape architectural profession in this state presented a bill for registration during the legislative session just ending. You probably also know that the bill was reported out unfavorably by the Senate Committee on Licensing and Miscellany.

The engineering profession in the state is due an explanation and statement of intent regarding this past action. As the result of an opportunity afforded us on short notice to bring the act to the floor, and with the legislature already in session, the bill was hastily drafted. Little time was afforded our own group for review. To have entered into discussions with the various brother professions on such short notice seemed to us pointless. Therefore, we elected to proceed and see what could be done by amendment during passage or in the future.

The only organized group in the profession in the state is the Chicago Chapter of the American Society of Landscape Architects. Consequently, although we preferred that such not be the case, we became the action group under circumstances which were not entirely of our choosing.

The bill has been defeated and those of us who worked in its preparation and in Springfield feel that we have gained some valuable education. We now look forward to a year and a half of preparation for the drafting of a new bill with competent legal help, a review of it with kindred professions, and its sponsorship by a state-wide group of professionals other than solely by this Chapter. It is hoped that when we have progressed with this effort to a point where joint discussions will be proper and productive, we may seek your cooperation.

Sincerely yours,

George W. Wickstead, President  
Chicago Chapter, ASLA

176 W. Adams Street

Chicago 3, Illinois

Telephone: ST. 2-2423



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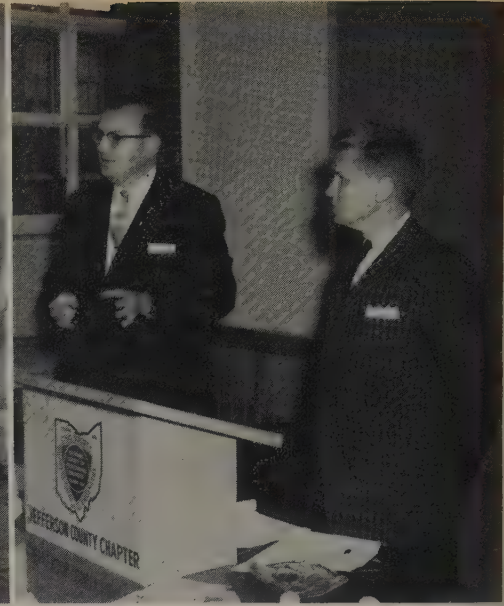
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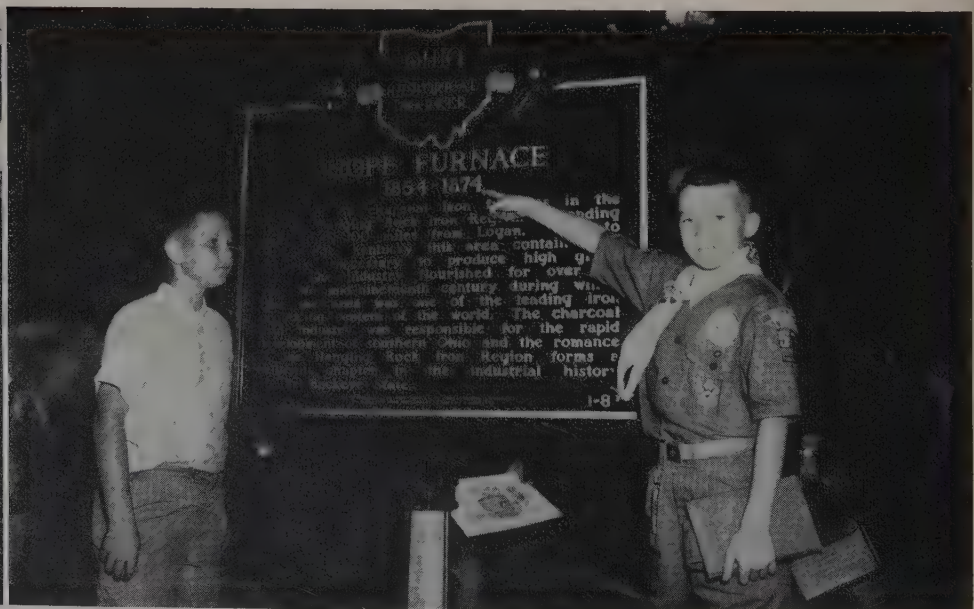
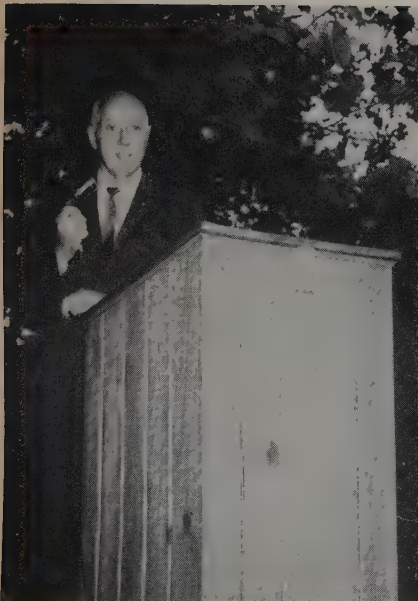


Ohio Chapter Presidents hold up one finger indicating enthusiasm for their membership motto "One for '61".



Robert J. Newbury, Executive Director, Illinois Society of Professional Engineers, urges Ohio's big cities to organize suburban chapters as President Roger W. Loveless, OSPE, looks on.

## EXCELLENT PUBLIC RELATIONS PROJECT BY THE OHIO SOCIETY OF PROFESSIONAL ENGINEERS



Dean E. J. Taylor, College of Engineering, Ohio University, presides over dedication of Hope Furnace historical marker, presented by the OSPE as a part of their program to honor historical engineering achievements.



## TWO DAYS WITH THE OHIO SOCIETY OF PROFESSIONAL ENGINEERS

by

ROBERT J. NEWBURY

*ISPE Executive Director*

On June 24th and 25th I was privileged to take part in a "double feature" with the Ohio Society of Professional Engineers at Athens, Ohio. The first day the Ohio Chapter Presidents' Conference was held at the University Center, Ohio University. In my remarks to the Ohio Chapter Presidents, I covered many topics regarding Society activities, but three in particular proved to be of extreme interest to this audience of Ohio leaders:

(1) The Illinois Society's IBM personnel accounting system and central office billing procedures were explained in detail and the Ohio Society staff has begun preliminary investigation with regard to converting their paperwork to electronic accounting.

(2) Our plans for an intensive Illinois membership drive this fall, using new IBM membership cards for a state mailing and chapter follow-up, prompted favorable comment from many Ohio officials and no doubt they will seek ways and means to "Beat Illinois" in the 1962 NSPE Membership Contest.

(3) By request of Ohio's state president, Roger V. Loveless, a complete explanation was given regarding the formation of SUBURBAN CHAPTERS using the cities of MINNEAPOLIS-ST. PAUL and CHICAGO as successful examples where suburban chapters have been highly popular. The Cincinnati and Cleveland area Presidents apparently are getting prepared to try the suburban chapter plan, and if these cities do so next year, the states in our NSPE membership group are going to have their work cut out for them to beat Ohio in 1962. It has been my experience to watch new suburban chapters explode with about 100 members **each** during their first year of operation. If Cleveland and Cincinnati set up three suburban chapters each, an increase of at least 600 members in the OSPE will not be surprising.

I note from Society publications that most States are adopting the "ONE FOR '61" motto for their membership drives. ILLINOIS had better adopt "THREE BY AND FOR '62" if we expect to repeat as Group VI Membership Champions. This means that every member of ISPE should bring in three members by 1962!

The afternoon session of the Ohio Presidents' conference was devoted to a panel discussion and "brainstorming" for new ideas. I was happy to be a member of this panel and to give and get many ideas for im-

proving society activities. As you know, the Ohio Society of Professional Engineers, under the able guidance of their fine Executive Secretary, Lloyd Chacey, has been one of the strongest elements of NSPE. One could not attend an Ohio conference without profiting by it. The addition of Assistant Executive Secretary, Paul Furney, to the Ohio staff was also a move that will strengthen the Ohio Society.

Heart-warming features of the Ohio Presidents' Conference were the special arrangements made to entertain the wives and children during the working hours of the session, and the encouragement given for the entire family to attend the evening banquet.

Dr. John C. Baker, President of Ohio University, addressed the Ohio engineering families, and while not minimizing the importance of the United States' effort to secure engineering leadership, he did soundly "spank" America's engineering profession for "placing itself on a pedestal" and persisting to look "down" on technicians. Dr. Baker said that the underdeveloped nations need assistance from "men who can do things with their hands." He cited an example of this lack of technician know-how when he described a situation where thousands of dollars in American equipment sat idle overseas because there were no mechanics or technicians to keep it in operating condition. Dr. Baker urged the engineering profession to give all possible assistance in developing technical people so that the "Peace Corps"—and programs like it—could send much-needed technical assistance to the underdeveloped nations.

On the second day in Ohio I was invited to be a guest at the presentation and the dedication of an Ohio Historical Marker presented to the Ohio Division of Parks at the site of the ancient Hope Furnace at Lake Hope. This \$300 marker was sponsored by the Ohio Society of Professional Engineers, and is just one of many to be presented. A similar marker is being placed at the site of the Buckeye Furnace in Jackson County, another of some 70 early iron furnaces which from about 1815 to until well after the Civil War made the Southern Ohio area known as the "Ruhr of Ohio".

To the officers and staff of the OSPE I extend my sincerest gratitude for their many courtesies which made my short visit so pleasant, and to the Ohio Chapter Presidents my deepest appreciation for their warm reception.



## SUMMARY OF ISPE EXECUTIVE COMMITTEE ACTION

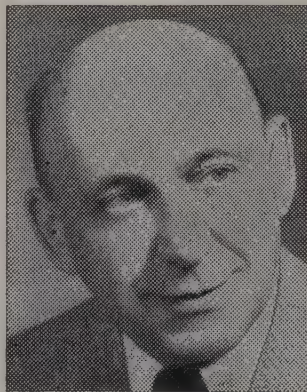
JULY 15—ST. LOUIS, MO.

1. Vice-President Manuel Garica reported on his attendance at the Indiana Society's Annual Meeting and indicated that there was exceptionally close fellowship and that the Indiana Society was a strong, vigorous organization.
2. The ISPE Functional Section of Structural Engineers is laying plans for an intensive Section membership drive.
3. The Board of Direction will be polled by mail on a recommended By-Law change designed to improve retention of new members joining ISPE late in the calendar year. The Membership Committee, Gerald Marks, Chairman, recommended Bylaw II Section B to be changed to read: "Persons admitted between July 1 and Labor Day, inclusive, shall pay a half year's dues. Persons admitted between the day after Labor Day and December 31 shall pay dues for the next entire calendar year." This change in effect gives new members joining after Labor Day about three months' free state membership, and takes into account the one or two months of paperwork (red tape) involved in getting the new members on the state and National rolls.
4. ISPE Public Relations Committee is being asked to study the "Missouri Guide to Engineering Services" published by the Mo. Society of Professional Engineers. This publication is distributed in Missouri to governmental bodies, and ISPE has recognized the need for such a brochure in Illinois.
5. New appointments to augment the Fees and Salaries Committee as requested by Chairman William Blank were approved and recommended for Board action in September.

6. See 1961 LEGISLATIVE REPORT in this issue for review of legislative action.
7. The Public Relations Committee, under the chairmanship of James Scott, reported that the idea of an ISPE Educational Exhibit at the 1961 State Fair came too late for implementation. The Committee felt the idea was good, but that the location suggested was not necessarily the best place for such an exhibit to reach the select group of people to which such an exhibit would be directed.
8. ISPE Executive Committee took note of editorial in June 29 Engineering News Record regarding scandals within the construction industry involving engineers and map plan to express our opposition to this type of unprofessional conduct.

### SPECIAL

#### AMSTUTZ APPOINTED TO NATIONAL CHAIRMANSHIP



MELVIN E. AMSTUTZ, P.E., Libertyville, Ill., has been appointed by Murray A. Wilson, P.E., N.S.P.E. President, to head the N.S.P.E. REGISTRATION COMMITTEE for the coming year.

Mr. Amstutz is the County Superintendent of Highways, Lake County Highway Dept. He is also a member of the Illinois Professional Engineer Examining Board, and his distinguished service to the profession through the state and national societies has been outstanding. Mr. Amstutz has held his Chapter Presidency and State Presidency, as well as serving in the capacities of state and national director.



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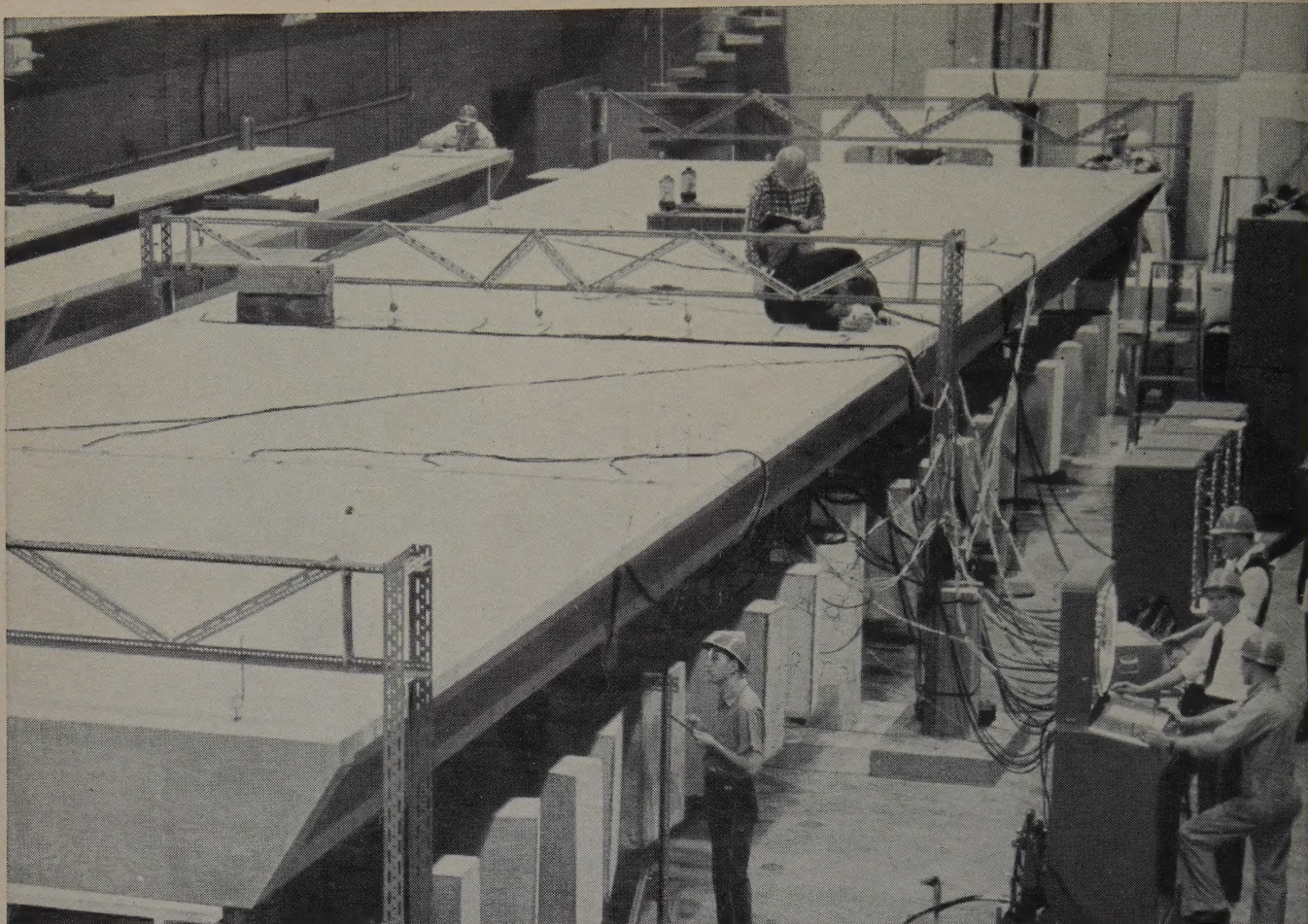
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